IMPROVEMENTS

IN THE

METHODS NOW IN USE

FOR TAKING THE

LONGITUDE

OF

A SHIP AT SEA.

INVENTED AND DESCRIBED

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IMPROVEMENTS, &c.

INVENTED AND DESCRIBED

By *SAMUEL DUNN*.

I. *Of the Method now in Use for finding the Longitude, in the Lunar Method.*

IN the Method now used, three Observations are to be made by three different Persons, at or near the same instant of Time. 1. The Distance of Sun and Moon, or Moon and Star. 2. The Sun or Star's Altitude. 3. The Moon's Altitude. These are the three cotemporary Observations.

In making these Observations, the greatest Accuracy should be in the Distance, next in the Sun or Star's Altitude, and next in the Altitude of the Moon. If the Observation be in the Night, as the Sun cannot be seen, a zodiacal Star is used in its stead, and the same accuracy should be had from the Star as from the Sun.

In the usual Method, if the Observer errs a Minute of a degree in the Distance, it may cause an Error of half a Degree in Longitude. If he errs a Minute of a Degree in the Sun or Star's Altitude, it may cause an error of a Mile in Longitude. An error of a Minute in the Moon's Altitude, will be various. Therefore, all the Observations, particularly of the Distance, should be made as carefully as possible, and with good Instruments,

This being the case in the usual Method, to the present time, and the three cotemporary Observations not easily to be had, on account of many hindrances that often prevent it, which are here omitted, it is more certain for one Observer only to make all the Observations that are necessary, by a Method that is correct; and such is here introduced.

It

It may be farther observed, that in the Methods used ever since the Longitude at sea became universally known and practised, three Persons have been employed in getting the Data belonging to a single set of Observations; and when the Medium of several sets of Observations have been taken, the like errors may have been in every set. On the contrary, when one Observer only has observed for all parts to be used, and several sets of such agree, each having been taken by one Person only, there is the utmost certainty to be expected. For,

In these Improvements, one Observer alone may make all the Observations that are necessary for the the Longitude, and Two, Three or more Observers may be mutual Proofs to each other. The Instruments to be used are the same as hitherto used, and the manner of using them is as follows.

II. Of the Instruments used in the Method here treated of, and their Preparation.

The Instruments to be used in making Observations for finding the Longitude, by this Method, are, 1. An adjusted Sextant; 2. An adjusted Octant; 3. Another that may be of an inferior kind; and 4. A pocket Watch. The Sextant is for taking the angular Distance of Sun and Moon, or Moon and Star. The first Octant is for taking the Sun or Star's Altitude. The second Octant is for taking the Moon's Altitude. The Watch is for shewing the Intervals at each Half-minute or Minute of Time. There is no need of any person to assist the Observer; however if one is at hand that can read off the Divisions, and speak when each Half-minute or Minute is ended, the Observations will be the more certain. With these Instru-

A 2   ments

ments before the Observer, he is first to prepare them for an Observation.

To prepare the Sextant, bring the Sun and Moon's nearest Limbs to touch each other, screw the Index, and it is prepared. To prepare the Sun or Star's Octant, bring the Sun's lower Limb, or the Star, to touch the Horizon, screw the Index, and it is prepared. To prepare the Moon's Octant, bring the Moon's lower or upper Limb to touch the Horizon, screw the Index, and it is prepared. These three Instruments being thus prepared, and the Watch going on, the Observer may begin and proceed through every Observation, according to the Order or Forms following, making an Observation at the end of each Half-minute or Minute of Time, which of the two he chooses for having sufficient intermediate times, to read and write down his Observations.

In making these Observations, the Observer will instantly find and unite the Objects, because their angular Distance will not become much greater or less during many Minutes of Time; this gives him more certainty concerning the Contact of Sun and Moon, or Moon and Star. The change of Altitude in Sun or Star, or the Moon, cannot exceed a Degree in four Minutes of Time; therefore each of their Altitudes may be instantly taken at every Observation with all possible certainty. The fulfilling of the Half-minutes or Minutes will appear on the Dial plate of the Watch; otherwise, although no assistant be wanted, where one is, he may speak the instant and read off the Observations, putting them down as they are made. Or the Observer may be ready a few Seconds of Time before or after the instant of Observation, and count the few Seconds sufficiently exact.

III. *Rules for taking the angular Distances of Sun and Moon, or Moon and zodiacal Stars; also for taking the Altitudes of Sun, Moon, and zodiacal Stars.*

THE Instruments being prepared, they may be instantly applied in an Observation. 1. The Distance of the Limbs is to be taken. If it is the Sun and Moon, the Sun is shaded and made to pass forward and backward near the Moon's nearest Limb till the Observer sees it in contact at the beginning of the Half-minute or Minute of Time when the Observation begins. This Distance of Limbs being read and written down, the Sextant is laid down, and the Sun or Moon's Octant taken up prepared, and is to be applied in taking the Altitude of the Sun's lower Limb, by making it sweep the Horizon. In the same manner, the Moon's Octant prepared, is taken up and applied; after which it is laid down, and an Observation made as the Form directs.

In making a set of Observations for the Longitude by the Moon and zodiacal Star; with the Sextant prepared, the Moon's Limb is brought to the Star, or otherwise the Star is brought to pass at contact to the Moon's nearest or farthest Limb, which of the two can be observed. Then by the Star's Octant the Star's Altitude is taken at the beginning of the next Half-minute or Minute of Time, &c. Then the Altitude of the Moon's lower Limb is observed, &c. in all cases as the Form directs, or according to the Principles on which the Form is founded.

The number of Terms in these Forms are odd, to have the Distance a Middle term; and therefore, the Terms equidistant from the Middle Term, will not differ much from each other, the Intervals of Time being small and equal.

In like manner eleven, or any other odd number of Terms may be applied, and the Mediums will give cotemporary Observations to greater accuracy.

1. Distance

IV. *Forms for Observations.*

FORM I.

1. Distance nearest Limbs.
2. Altitude Sun's lower Limb.
3. Altitude Moon's Limb.
4. Distance nearest Limbs.
5. Altitude Moon's Limb.
6. Altitude Sun's lower Limb.
7. Distance nearest Limbs.

FORM II.

1. Altitude Sun's lower Limb.
2. Distance nearest Limbs.
3. Altitude Moon's Limb.
4. Distance nearest Limbs.
5. Altitude Moon's Limbs.
6. Distance nearest Limbs.
7. Altitude Sun's lower Limb.

FORM III.

1. Altitude Sun's lower Limb.
2. Altitude Moon's Limb.
3. Distance nearest Limbs.
4. Distance nearest Limbs.
5. Distance nearest Limbs.
6. Altitude Moon's Limb.
7. Altitude Sun's lower Limb.

FORM IV.

1. Distance nearest Limbs.
2. Altitude Moon's Limb.
3. Altitude Sun's lower Limb.
4. Distance nearest Limbs.
5. Altitude Sun's lower Limb.
6. Altitude Moon's Limb.
7. Distance nearest Limbs.

FORM V.

1. Altitude Moon's Limb.
2. Distance nearest Limbs.
3. Altitude Sun's lower Limb.
4. Distance nearest Limbs.
5. Altitude Sun's lower Limb.
6. Distance nearest Limbs.
7. Altitude Moon's Limb.

FORM VI.

1. Altitude Moon's Limb.
2. Altitude Sun's lower Limb.
3. Distance nearest Limbs.
4. Distance nearest Limbs.
5. Distance nearest Limbs.
6. Altitude Sun's lower Limb.
7. Altitude Moon's Limb.

In these Forms, the Sun and Moon's Altitude are alike provided for, to have the Distance as correct as possible. If greater Accuracy be required, they should be repeated contrarily.

These Forms shew that Seven good Observations made within a few Minutes of Time, will give cotemporary Observations for use. More will not be wanted in usual Cases.

FORM VII.

1. Diftance neareft Limbs,
2. Altitude Sun's lower Limb.
3. Altitude Moon's Limb.
4. Diftance neareft Limbs.
5. Diftance neareft Limbs.
6. Diftance neareft Limbs.
7. Altitude Moon's Limb.
8. Altitude Sun's lower Limb.
9. Diftance neareft Limbs.

FORM VIII.

1. Altitude Sun's lower Limb.
2. Diftance neareft Limbs,
3. Altitude Moon's Limb.
4. Diftance neareft Limbs.
5. Diftance neareft Limbs.
6. Diftance neareft Limbs.
7. Altitude Moon's Limb.
8. Diftance neareft Limbs,
9. Altitude Sun's lower Limb.

FORM IX.

1. Altitude Sun's lower Limb.
2. Altitude Moon's Limb.
3. Diftance neareft Limbs.
4. Diftance neareft Limbs,
5. Diftance neareft Limbs.
6. Diftance neareft Limbs.
7. Diftance neareft Limbs.
8. Altitude Moon's Limb.
9. Altitude Sun's lower Limb.

FORM X.

1. Diftance neareft Limbs.
2. Altitude Moon's Limb.
3. Altitude Sun's lower Limb.
4. Diftance neareft Limbs.
5. Diftance neareft Limbs.
6. Diftance neareft Limbs.
7. Altitude Sun's lower Limb.
8. Altitude Moon's Limb.
9. Diftance neareft Limbs.

FORM XI.

1. Altitude Moon's Limb.
2. Diftance neareft Limbs.
3. Altitude Sun's lower Limb.
4. Diftance neareft Limbs.
5. Diftance neareft Limbs.
6. Diftance neareft Limbs.
7. Altitude Sun's lower Limb.
8. Diftance neareft Limbs.
9. Altitude's Moon's Limb.

FORM XII.

1. Altitude Moon's Limb.
2. Altitude Sun's lower Limb.
3. Diftance neareft Limbs.
4. Diftance neareft Limbs.
5. Diftance neareft Limbs.
6. Diftance neareft Limbs,
7. Diftance neareft Limbs,
8. Altitude Sun's lower Limb.
9. Altitude Moon's Limb.

V. *Use of this Method, in application to the Fixed Stars.*

In like manner may two adjusted Octants be prepared, and the Altitudes of different Fixed Stars be taken and applied for finding the true Time at the Ship.   For instance, suppose Castor and Pollux have their Altitudes taken at the end of a Minute of Time from each other ; and again twice at the ends of other Minutes, Castor and Pollux with a Minute of Interval between them.   Each of these two Stars will have a middle Term to compare with the half sum of the Extremes, and hereby each of the Star's equatorial Distance from the Meridian, will be had to the greatest accuracy ; and by applying the Sun's Right Ascension, the Time at the Ship or place of Observation.   For such and other like useful purposes is the following Table of Fixed Stars, computed to the greatest accuracy.

The Lunar Method of taking the Longitude at Sea, hath been practised with success more than twenty-five years ; and it might have been practised in long Voyages, with more success than the usual Method of sailing, Sixty years ago, but for the incumberances of Refraction and Parallax.   Forty Years ago, Dr. Bradley at Greenwich in the Observatory told me, he did not think it would ever be made easy enough for the Sea Officers, Within the last twenty-five Years many Navigators, well qualified, have complained to me they could not have the three co-temporary Observations correct enough, for want of proper Assistants.   By following the instructions here delivered no more than one Person is wanted for making the Observations and Calculation, and the truth of its Principles is supported by the Geometry of curve Lines and Astronomy of the Sphere. Therefore, one Person only, may henceforth be enough for taking the Longitude in a Ship at Sea.

RIGHT ASCENSIONS and DECLINATIONS

OF THE

FIXED STARS.

Constructed and computed by SAMUEL DUNN.

ALGENIB γ in Pegasus, 2 Mag.			ALDEBARAN α in Taurus, 1 Mag.		
Jan. 1.	Rt. Ascension.	Declination.	Jan. 1.	Rt. Ascension.	Declination.
Year.	Deg. M. S.	Deg. M. S.	Year.	Deg. M. S.	Deg. M. S.
1794	0.39.41	14. 2.15n.	1794	66. 1.44	16. 4.58n.
1795	0.40.27	14. 2.35n.	1795	66. 2.35	16. 5. 6n.
1796	0.41.13	14. 2.55n.	1796	66. 3.27	16. 5.15n.
1797	0.41.59	14. 3.15n.	1797	66. 4.19	16. 5.23n.
1798	0.42.45	14. 3.35n.	1798	66. 5.10	16. 5.31n.
1799	0.43.31	14. 3.55n.	1799	66. 6. 3	16. 5.39n.
1800	0.44.17	14. 4.15n.	1800	66. 6.54	16. 5.48n.
1801	0.45. 3	14. 4.35n.	1801	66. 7.46	16. 5.56n.
1802	0.45.49	14. 4.55n.	1802	66. 8.37	16. 6. 4n.
1803	0.46.35	14. 5.15n.	1803	66. 9.29	16. 6.12n.
1804	0.47.20	14. 5.35n.	1804	66.10.20	16. 6.20n.
1805	0.48. 6	14. 5.55n.	1805	66.11.12	16. 6.29n.
1806	0.48.52	14. 6.16n.	1806	66.12. 3	16. 6.37n.
1807	0.49.38	14. 6.36n.	1807	66.12.54	16. 6.45 .
1808	0.50.24	14. 6.56n.	1808	66.13.46	16. 6.53n.
1809	0.51.10	14. 7.16n.	1809	66.14.37	16. 7. 2n.
1810	0.51.56	14. 7.36n.	1810	66.15.28	16. 7.10n.
1811	0.52.42	14. 7.56n.	1811	66.16.20	16. 7.18n.
1812	0.53.28	14. 8.16n.	1812	66.17.12	16. 7.26n.
1813	0.54.14	14. 8.36n.	1813	66.18. 3	16. 7.34n.
1814	0.55. 0	14. 8.56n.	1814	66.18.54	16. 7.43n.
1815	0.55.46	14. 9.16n.	1815	66.19.46	16. 7.51n.
1816	0.56.32	14. 9.36n.	1816	66.20.37	16. 7.59n.
1817	0.57.18	14. 9.56n.	1817	66.21.29	16. 8. 8n.
1818	0.58. 4	14.10.16n.	1818	66.22.20	16. 8.16n.
1819	0.58.50	14.10.36n.	1819	66.23.11	16. 8.24n.
1820	0.59.36	14.10.56n.	1820	66.24. 3	16. 8.32n.
1821	1. 0.22	14.11.16n.	1821	66.24.54	16. 8.41n.
1822	1. 1. 8	14.11.36n.	1822	66.25.46	16. 8.49n.
1823	1. 1.54	14.11.56n.	1823	66.26.37	16. 8.57n.
1824	1. 2.40	14.12.16n.	1824	66.27.28	16. 9. 5n.

B

CAPELLA α in Auriga, 1 Mag.

Jan. 1. Year.	Rt. Ascension. Deg. M. S.	Declination. Deg. M. S.
1794	75.22.24	45.46.28n.
1795	75.23.30	45.46.33n.
1796	75.24.36	45.46.39n.
1797	75.25.43	45.46.43n.
1798	75.26.49	45.46.49n.
1799	75.27.55	45.46.54n.
1800	75.29. 2	45.46.59n.
1801	75.30. 8	45.47. 4n.
1802	75.31.14	45.47. 9n.
1803	75.32.20	45.47.14n.
1804	75.33.27	45.47.20n.
1805	75.34.33	45.47.25n.
1806	75.35.39	45.47.30n.
1807	75.36.45	45.47.35n.
1808	75.37.52	45.47.40n.
1809	75.38.58	45.47.45n.
1810	75.40. 4	45.47.50n.
1811	75.41.10	45.47.56n.
1812	75.42.17	45.48. 1n.
1813	75.43.23	45.48. 6n.
1814	75.44.29	45.48.11n.
1815	75.45.35	45.48.17n.
1816	75.46.41	45.48.22n.
1817	75.47.48	45.48.27n.
1818	75.48.54	45.48.32n.
1819	75.50. 0	45.48.38n.
1820	75.51. 7	45.48.43n.
1821	75.52.13	45.48.48n.
1822	75.53.19	45.48.53n.
1823	75.54.25	45.48.58n.
1824	75.55.32	45.49. 4n.

RIGEL β in Orion, 1 Mag.

Jan. 1. Year.	Rt. Ascension. Deg. M. S.	Declination. Deg. M. S.
1794	76. 9.30	8.27.10s.
1795	76.10.14	8.27. 5s.
1796	76.10.57	8.27. 1s.
1797	76.11.40	8.26.56s.
1798	76.12.23	8.26.51s.
1799	76.13. 6	8.26.46s.
1800	76.13.50	8.26.41s.
1801	76.14.33	8.26.36s.
1802	76.15.16	8.26.31s.
1803	76.15.59	8.26.27s.
1804	76.16.42	8.26.22s.
1805	76.17.26	8.26.17s.
1806	76.18. 9	8.26.12s.
1807	76.18.52	8.26. 7s.
1808	76.19.35	8.26. 2s.
1809	76.20.18	8.25.57s.
1810	76.21. 2	8.25.53s.
1811	76.21.45	8.25.48s.
1812	76.22.28	8.25.43s.
1813	76.23.11	8.25.38s.
1814	76.23.55	8.25.33s.
1815	76.24.38	8.25.28s.
1816	76.25.21	8.25.24s.
1817	76.26. 4	8.25.19s.
1818	76.26.47	8.25.14s.
1819	76.27.31	8.25. 9s.
1820	76.28.14	8.25. 4s.
1821	76.28.57	8.24.59s.
1822	76.29.40	8.24.54s.
1823	76.30.23	8.24.50s.
1824	76.31. 7	8.24.45s.

By this Table, the Stars Capella, Rigel, Betalgeuse, Castor, Pollux, Sirius, Procyon, Canopus, Antares, have but little change of Declination in Thirty Years; and therefore, they should be well known, as their Meridian Altitudes determine the Latitude.

BETALGEUSE a in Orion, 1 Mag.

Jan. 1. Rt. Ascension. Declination.

Year	Deg. M. S.	Deg. M. S.
1794	86. 0.23	7.21.25n.
1795	86. 1.12	7.21.26n.
1796	86. 2. 0	7.21.27n.
1797	86. 2.49	7.21.29n.
1798	86. 3.38	7.21.30n.
1799	86. 4.27	7.21.32n.
1800	86. 5.15	7.21.33n.
1801	86. 6. 4	7.21.35n.
1802	86. 6.53	7.21.36n.
1803	86. 7.41	7.21.38n.
1804	86. 8.30	7.21.39n.
1805	86. 9.19	7.21.41n.
1806	86.10. 7	7.21.42n.
1807	86.10.56	7.21.44n.
1808	86.11.45	7.21.45n.
1809	86.12.34	7.21.47n.
1810	86.13.22	7.21.48n.
1811	86.14.11	7.21.49n.
1812	86.15. 0	7.21.51n.
1813	86.15.48	7.21.52n.
1814	86.16.37	7.21.54n.
1815	86.17.26	7.21.56n.
1816	86.18.14	7.21.57n.
1817	86.19. 3	7.21.59n.
1818	86.19.52	7.22. 0n.
1819	86.20.41	7.22. 2n.
1820	86.21.29	7.22. 3n.
1821	86.22.18	7.22. 5n.
1822	86.23. 7	7.22. 6n.
1823	86.23.55	7.22. 7n.
1824	86.24.44	7.22. 9n.

CANOPUS a in Argo Navis, 1 Mag.

Jan. 1. Rt. Ascension. Declination.

Year	Deg. M. S.	Deg. M. S.
1794	94.50.46	52.35.12s.
1795	94.51. 6	52.35.14s.
1796	94.51.26	52.35.15s.
1797	94.51.46	52.35.17s.
1798	94.52. 6	52.35.19s.
1799	94.52.26	52.35.20s.
1800	94.52.46	52.35.22s.
1801	94.53. 6	52.35.24s.
1802	94.53.26	52.35.25s.
1803	94.53.46	52.35.27s.
1804	94.54. 7	52.35.29s.
1805	94.54.27	52.35.30s.
1806	94.54.47	52.35.32s.
1807	94.55. 2	52.35.34s.
1808	94.55.27	52.35.36s.
1809	94.55.47	52.35.37s.
1810	94.56. 7	52.35.39s.
1811	94.56.27	52.35.41s.
1812	94.56.47	52.35.42s.
1813	94.57. 7	52.35.44s.
1814	94.57.27	52.35.46s.
1815	94.57.47	52.35.47s.
1816	94.58. 7	52.35.49s.
1817	94.58.27	52.35.51s.
1818	94.58.47	52.35.52s.
1819	94.59. 7	52.35.54s.
1820	94.59.27	52.35.56s.
1821	94.59.47	52.35.57s.
1822	95. 0. 7	52.35.59s.
1823	95. 0.27	52.36. 1s.
1824	95. 0.48	52.36. 2s.

B 2

Sirius α in Canis Major, 1 Mag.			Castor α in Gemini, 1. 2 Mag.		
Jan. 1.	Rt. Ascension.	Declination.	Jan. 1.	Rt. Ascension.	Declination.
Year.	Deg. M. S.	Deg. M. S.	Year.	Deg. M. S.	Deg. M. S
1794	99. 1.20	16.26.15s.	1794	110.21.31	32.19.30n.
1795	99. 2. 0	16.26.19s.	1795	110.22.29	32.19.23n.
1796	99. 2.40	16.26.23s.	1796	110.23.27	32.19.16n.
1797	99. 3.20	16.26.27s.	1797	110.24.25	32.19. 9n.
1798	99. 4. 0	16.26.31s.	1798	110.25.23	32.19. 2n.
1799	99. 4.40	16.26.36s.	1799	110.26.21	32.18.56n.
1800	99. 5.20	16.26.40s.	1800	110.27.19	32.18.48n.
1801	99. 6. 0	16.26.45s.	1801	110.28.17	32.18.42n.
1802	99. 6.40	16 26.49s.	1802	110.29.15	32.18.35n.
1803	99. 7.20	16.26.53s.	1803	110.30.13	32.18.28n.
1804	99. 8. 0	16 26.58s.	1804	110.31.11	32.18.21n.
1805	99. 8.40	16.27. 2s.	1805	110.32. 8	32.18.14n.
1806	99. 9.20	16.27. 7s.	1806	110.33. 6	32.18. 7n.
1807	99.10. 0	16.27.11s.	1807	110.34. 5	32.18. 0n.
1808	99.10.40	16.27.15s.	1808	110.35. 3	32.17.54n.
1809	99.11.20	16.27.20s.	1809	110.36. 0	32.17.47n.
1810	99.12. 0	16.27.24s.	1810	110 36 58	32.17.40n.
1811	99.12.39	16.27.28s.	1811	110.37.56	32.17.33n.
1812	99.13.19	16.27.33s.	1812	110.38.54	32.17.26n.
1813	99.13.59	16.27.38s.	1813	110.39.52	32.17.19n.
1814	99.14.39	16.27.42s.	1814	110.40.50	32.17.12n.
1815	99.15.19	16.27.47s.	1815	110.41.48	32.17. 5n.
1816	99.15.59	16 27.51s.	1816	110 42.46	32.16.58n.
1817	99.16.39	16.27.54s.	1817	110.43.44	32.16.52n.
1818	99.17.19	16.27.59s.	1818	110.44.42	32.16.45n.
1819	99.17.59	16.28. 3s.	1819	110.45.40	32.16.38n.
1820	99.18.39	16.28. 7s.	1820	110.46.38	32.16.31n.
1821	99.19.19	16.28.12s.	1821	110.47.36	32.16.24n.
1822	99.19.59	16.28.16s.	1822	110.48.34	32.16.17n.
1823	99.20.39	16.28.21s.	1823	110.49.32	32.16.10n.
1824	99.21.19	16.28.25s.	1824	110.50.29	32.16. 4n.

PROCYON α in Canis Minor, 1. 2 Mag.

Jan. 1.	Rt. Ascension.	Declination.
Year.	Deg. M. S.	Deg. M. S.
1794	112. 7.52	5.45. 8n.
1795	112. 8.40	5.45. 1n.
1796	112. 9.28	5.44.53n.
1797	112.10.16	5.44.46n.
1798	112.11. 3	5.44.38n.
1799	112.11.51	5.44.31n.
1800	112.12.39	5.44.23n.
1801	112.13.26	5.44.16n.
1802	112.14.14	5.44. 8n.
1803	112.15. 1	5.44. 1n.
1804	112.15.49	5.43.53n.
1805	112.16.36	5.43.45n.
1806	112.17.24	5.43.38n.
1807	112.18.12	5.43.30n.
1808	112.18.59	5.43.23n.
1809	112.19.47	5.43.15n.
1810	112.20.34	5.43. 8n.
1811	112.21.22	5.43. 0n.
1812	112.22. 9	5.42.53n.
1813	112.22.57	5.42.45n.
1814	112.23.45	5.42.38n.
1815	112.24.32	5.42.31n.
1816	112.25.20	5.42.33n.
1817	112.26. 7	5.42.16n.
1818	112.26.55	5.42. 8n.
1819	112.27.43	5.42. 1n.
1820	112.28.31	5.41.53n.
1821	112.29.19	5.41.46n.
1822	112.30. 6	5.41.38n.
1823	112.30.54	5.41.31n.
1824	112.31.42	5.41.23n.

POLLUX β in Gemini, 2, 3 Mag.

Jan. 1.	Rt. Ascension.	Declination.
Year.	Deg. M. S.	Deg. M. S.
1794	113.10.37	28.30.40n.
1795	113.11.33	28.30.32n.
1796	113.12.29	28.30.24n.
1797	113.13.24	28.30.12n.
1798	113.14.20	28.30. 9n.
1799	113.15.16	28.30. 1n.
1800	113.16.12	28.29.53n.
1801	113.17. 8	28.29.45n.
1802	113.18. 3	28.29.38n.
1803	113.18.59	28.29.36n.
1804	113.19.55	28.29.22n.
1805	113.20.51	28.29.14n.
1806	113.21.47	28.29. 6n.
1807	113.22.43	28.28.59n.
1808	113.23.38	28.28.51n.
1809	113.24.34	28.28.43n.
1810	113.25.30	28.28.35n.
1811	113.26.26	28.28.27n.
1812	113.27.22	28.28.20n.
1813	113.28.17	28.28.14n.
1814	113.29.13	28.28. 2n.
1815	113.30. 9	28.28. 2n.
1816	113.31. 5	28.27.56n.
1817	113.32. 1	28.27.48n.
1818	113.32.56	28.27.41n.
1819	113.33.52	28.27.33n.
1820	113.34.48	28.27.25n.
1821	113.35.44	28.27.17n.
1822	113.36.40	28.27. 9n.
1823	113.37.35	28.26.54n.
1824	113.38.31	28.25.46n.

† Regulus α in Leo, 1 Mag.				Spica α in Virgo, 1 Mag.			
Jan. 1.	Rt. Ascension.	Declination.		Jan. 1.	Rt. Ascension.	Declination.	
Year.	Deg. M. S.	Deg. M. S.		Year.	Deg. M. S.	Deg. M. S.	
1794	149.20.33	12.58.22n.		1794	198.35.29	10. 4.49s.	
1795	149.21.21	12.58. 5n.		1795	198.36.16	10. 5. 8s.	
1796	149.22.10	12.57.47n.		1796	198.37. 3	10. 5.27s.	
1797	149.22.58	12.57.30n.		1797	198.37.51	10. 5.46s.	
1798	149.23.46	12.57.13n.		1798	198.38.38	10. 6.15s.	
1799	149.24.35	12.56.56n.		1799	198.39.25	10. 6.24s.	
1800	149.25.23	12.56.38n.		1800	198.40.12	10. 6.43s.	
1801	149.26.11	12.56.21n.		1801	198.40.59	10. 7. 2s.	
1802	149.26.59	12.56. 4n.		1802	198.41.47	10. 7.21s.	
1803	149.27.48	12.55.46n.		1803	198.42.34	10. 7.40s.	
1804	149.28.36	12.55.29n.		1804	198.43.21	10. 7.59s.	
1805	149.29.25	12.55.12n.		1805	198.44. 8	10. 8.18s.	
1806	149.30.13	12.54.55n.		1806	198.44.55	10. 8.37s.	
1807	149.31. 0	12.54.37n.		1807	198.45.43	10. 8.56s.	
1808	149.31.49	12.54.20n.		1808	198.46.30	10. 9.15s.	
1809	149.32.38	12.54. 3n.		1809	198.47.17	10. 9.34s.	
1810	149.33.26	12.53.46n.		1810	198.48. 4	10. 9.53s.	
1811	149.34.15	12.53.28n.		1811	198.48.51	10.10.12s.	
1812	149.35. 3	12.53.11n.		1812	198.49.39	10.10.31s.	
1813	149.35.51	12.52.53n.		1813	198.50.26	10.10.50s.	
1814	149.36.39	12.52.36n.		1814	198.51.13	10.11. 0s.	
1815	149.37.28	12.52.19n.		1815	198.52. 0	10.11.28s.	
1816	149.38.16	12.52. 1n.		1816	198.52.47	10.11.47s.	
1817	149.39. 5	12.51.44n.		1817	198.53.35	10.12. 6s.	
1818	149.39.53	12.51.27n.		1818	198.54.22	10.12.25s.	
1819	149.40.41	12.51.10n.		1819	198.55. 9	10.12.44s.	
1820	149.41.29	12.50.52n.		1820	198.55.56	10.13. 3s.	
1821	149.42.18	12.50.35n.		1821	198.56.43	10.13.22s.	
1822	149.43. 6	12.50.18n.		1822	198.57.31	10.13.41s.	
1823	149.43.54	12.50. 0n.		1823	198.58.18	10.14. 0s.	
1824	149.44.42	12.49.43n.		1824	198.59. 5	10.14.19s.	

ARCTURUS α in Bootes, 1 Mag.			ANTARES α in Scorpio, 1 Mag.		
Jan. 1.	Rt. Ascension.	Declination.	Jan. 1.	Rt. Ascension.	Declination.
Year.	Deg. M. S.	Deg. M. S.	Year.	Deg. M. S.	Deg. M. S.
1794	211.34. 9	20.16. 3n.	1794	244.12. 6	25.57.58s.
1795	211.34.50	20.15.45n.	1795	244.13. 1	25.58. 7s.
1796	211.35.32	20.15.26n.	1796	244.13.56	25.58.15s.
1797	211.36.13	20.15. 8n.	1797	244.14.50	25.58.24s.
1798	211.36.55	20.14.49n.	1798	244.15.45	25.58.33s.
1799	211.37.36	20.14.31n.	1799	244.16.40	25.58.42s.
1800	211.38.18	20.14.12n.	1800	244.17.35	25.58.51s.
1801	211.39. 0	20.13.54n.	1801	244.18.30	25.58.59s.
1802	211.39.41	20.13.36n.	1802	244.19.24	25.59. 8s.
1803	211.40.23	20.13.17n.	1803	244.20.19	25.59.17s.
1804	211.41. 4	20.12.59n.	1804	244.21.14	25.59.26s.
1805	211.41.45	20.12.40n.	1805	244.22. 9	25.59.34s.
1806	211.42.27	20.12.22n.	1806	244.23. 4	25.59.43s.
1807	211.43. 8	20.12. 4n.	1807	244.23.58	25.59.52s.
1808	211.43.50	20.11.45n.	1808	244.24.53	26. 0. 1s.
1809	211.44.32	20.11.26n.	1809	244.25.48	26. 0. 9s.
1810	211.45.13	20.11. 7n.	1810	244.26.43	26. 0.18s.
1811	211.45.55	20.10.49n.	1811	244.27.38	26. 0.27s.
1812	211.46.36	20.10.31n.	1812	244.28.32	26. 0.36s.
1813	211.47.18	20.10.12n.	1813	244.29.27	26. 0.45s.
1814	211.47.59	20. 9.54n.	1814	244.30.22	26. 0.53s.
1815	211.48.40	20. 9.35n.	1815	244.31.17	26. 1. 2s.
1816	211.49.22	20. 9.17n.	1816	244.32.12	26. 1.11s.
1817	211.50. 3	20. 8.59n.	1817	244.33. 6	26. 1.18s.
1818	211.50.45	20. 8.49n.	1818	244.34. 1	26. 1.27s.
1819	211.51.26	20. 8.22n.	1819	244.34.56	26. 1.36s.
1820	211.52. 8	20. 8. 3n.	1820	244.35.51	26. 1.45s.
1821	211.52.49	20. 7.44n.	1821	244.36.46	26. 1.53s.
1822	211.53.31	20. 7.26n.	1822	244.37.40	26. 2. 2s.
1823	211.54.12	20. 7. 8n.	1823	244.38.35	26. 2.11s.
1824	211.54.54	20. 6.49n.	1824	244.39.30	26. 2.20s.

LYRA α in the Harp, 1 Mag.		
Jan. 1.	Rt. Afcenfion.	Declination.
Year.	Deg. M. S.	Deg. M. S.
1794	277.29. 1	38.35.51n.
1795	277.29.31	38.35.53n.
1796	277.30. 2	38.35.56n.
1797	277.30.32	38.35.59n.
1798	277.31. 2	38.36. 1n.
1799	277.31.33	38.36. 4n.
1800	277.32. 3	38.36. 6n.
1801	277.32.33	38.36. 9n.
1802	277.33. 4	38.36.12n.
1803	277.33.34	38.36.14n.
1804	277.34. 5	38.36.17n.
1805	277.34.35	38.36.20n.
1806	277.35. 6	38.36.22n.
1807	277.35.37	38.36.25n.
1808	277.36. 8	38.36.27n.
1809	277.36.38	38.36.30n.
1810	277.37. 9	38.36.33n.
1811	277.37.40	38.36.35n.
1812	277.38.11	38.36.38n.
1813	277.38.42	38.36.40n.
1814	277.39.13	38.36.46n.
1815	277.39.44	38.36.48n.
1816	277.40.15	38.36.43n.
1817	277.40.45	38.36.51n.
1818	277.41.16	38.36.53n.
1819	277.41.47	38.36.56n.
1820	277.42.18	38.36.59n.
1821	277.42.49	38.37. 1n.
1822	277.43.20	38.37. 4n.
1823	277.43.51	38.37. 6n.
1824	277.44.21	38.37. 9n.

London, May 6, 1793.

FOMALHAUT α in the Fifh.		
Jan. 1.	Rt. Afcenfion.	Declination.
Year.	Deg. M. S.	Deg. M. S.
1794	341.33.23	30.42.40s.
1795	341.34.13	30.42.21s.
1796	341.35. 3	30.42. 2s.
1797	341.35.53	30.41.43s.
1798	341.36.43	30.41.24s.
1799	341.37.32	30.41. 4s.
1800	341.38.22	30.40.45s.
1801	341.39.12	30.40.26s.
1802	341.40. 2	30.40. 7s.
1803	341.40.52	30.39.48s.
1804	341.41.42	30.39.29s.
1805	341.42.32	30.39.11s.
1806	341.43.22	30.38.52s.
1807	341.44.12	30.38.33s.
1808	341.45. 2	30.38.14s.
1809	341.45.51	30.37.55s.
1810	341.46.41	30.37.36s.
1811	341.47.31	30.37.16s.
1812	341.48.21	30.36.57s.
1813	341.49.11	30.36.38s.
1814	341.50. 0	30.36.19s.
1815	341.50.50	30.36. 1s.
1816	341.51.40	30.35.42s.
1817	341.52.30	30.35.23s.
1818	341.53.20	30.35. 4s.
1819	341.54.10	30.34.45s.
1820	341.55. 0	30.34.26s.
1821	341.55.50	30.34. 7s.
1822	341.56.40	30.33.48s.
1823	341.57.30	30.33.29s.
1824	341.58.20	30.33.10s.

S. DUNN.

END.

DAILY TABLES of NAUTICAL SCIENCES,

Supplementary, conftructed and computed by SAMUEL DUNN.

SUN'S TABLE in 1793 and 1797.

	JANUARY.					FEBRUARY.			
	Right Afcenfion.		Declination.			Right Afcenfion.		Declination.	
Day	Deg. M.	Diff.	Deg. M.	Diff.	Day	Deg. M.	Diff.	Deg. M.	Diff.
1	282.40	M.	22.57s.	M.	1	315.40	M.	16.52s.	M.
2	283.47	67	22.51s.	6	2	316.41	61	16.35s.	17
3	284.53	66	22.45s.	6	3	317.42	61	16.17s.	18
4	285.59	66	22.39s.	6	4	318.42	60	15.59s.	18
5	287. 4	65	22.32s.	7	5	319.43	61	15.41s.	18
6	288.10	66	22.25s.	7	6	320.43	60	15.22s.	19
7	289.16	66	22.17s.	8	7	321.42	59	15. 3s.	19
8	290.21	65	22. 9s.	8	8	322.42	60	14.44s.	19
9	291.27	66	22. 0s.	9	9	323.42	60	14.25s.	19
10	292.32	65	21.51s.	9	10	324.41	59	14. 5s.	20
11	293.37	65	21.41s.	10	11	325.40	59	13.45s.	20
12	294.42	65	21.31s.	10	12	326.39	59	13.25s.	20
13	295.47	65	21.21s.	10	13	327.37	58	13. 5s.	20
14	296.51	64	21.10s.	11	14	328.36	59	12.45s.	20
15	297.56	65	20.59s.	11	15	329.34	58	12.24s.	21
16	299. 0	64	20.47s.	12	16	330.32	58	12. 3s.	21
17	300. 4	64	20.35s.	12	17	331.30	58	11.42s.	21
18	301. 8	64	20.23s.	12	18	332.28	58	11.21s.	21
19	302.11	63	20.10s.	13	19	333.25	57	10.59s.	22
20	303.15	64	19.57s.	13	20	334.23	58	10.38s.	21
21	304.18	63	19.44s.	13	21	335.20	57	10.16s.	22
22	305.21	63	19.30s.	14	22	336.17	57	9.54s.	22
23	306.24	63	19.16s.	14	23	337.14	57	9.32s.	22
24	307.27	63	19. 1s.	15	24	338.11	57	9.10s.	22
25	308.30	63	18.46s.	15	25	339. 7	56	8.48s.	22
26	309.32	62	18.31s.	15	26	340. 4	57	8.25s.	23
27	310.33	61	18.15s.	16	27	341. 0	56	8. 3s.	23
28	311.35	62	17.59s.	16	28	341.56	56	7.40s.	23
29	312.37	62	17.43s.	16					
30	313.38	61	17.26s.	17					
31	314.39	61	17. 9s.	17					

D

SUN's TABLE in 1793 and 1797.

	MARCH					APRIL			
	Right Ascension.		Declination.			Right Ascension.		Declination.	
Day	Deg. M.	Diff.	Deg. M.	Diff.	Day	Deg. M.	Diff.	Deg. M.	Diff.
1	342.52	M.	7.17s	M.	1	11.14	M.	4.50n	M.
2	343.48	56	6.54s	23	2	12. 8	54	5.13n	23
3	344.44	56	6.31s	23	3	13. 3	55	5.36n	23
4	345.40	56	6. 8s	23	4	13.58	55	5.59n	23
5	346.35	55	5.45s	23	5	14.52	54	6.21n	22
6	347.31	56	5.22s	23	6	15.47	55	6.44n	23
7	348.26	55	4.58s	24	7	16.42	55	7. 7n	23
8	349.22	56	4.35s	23	8	17.37	55	7.29n	22
9	350.17	55	4.11s	24	9	18.32	55	7.51n	22
10	351.12	55	3.48s	23	10	19.27	55	8.13n	22
11	352. 7	55	3.24s	24	11	20.22	55	8.35n	22
12	353. 2	55	3. 1s	23	12	21.17	55	8.57n	22
13	353.57	55	2.37s	24	13	22.12	55	9.19n	22
14	354.52	55	2.13s	24	14	23. 8	56	9.40n	21
15	355.47	55	1.50s	23	15	24. 3	55	10. 2n	22
16	356.42	55	1.26s	24	16	24.58	55	10.23n	21
17	357.36	54	1. 2s	24	17	25.54	56	10.44n	21
18	358.31	55	0.39s	23	18	26.50	56	11. 5n	21
19	359.26	55	0.15s	24	19	27.45	55	11.26n	21
20	0.20	54	0. 9n	24	20	28.41	56	11.46n	20
21	1.15	55	0.32n	23	21	29.37	56	12. 6n	20
22	2. 9	54	0.56n	24	22	30.33	56	12.27n	21
23	3. 4	55	1.20n	24	23	31.32	57	12.46n	19
24	3.58	54	1.43n	23	24	32.26	56	13. 6n	20
25	4.53	55	2. 7n	23	25	33.22	56	13.26n	20
26	5.47	54	2.30n	24	26	34.19	57	13.45n	19
27	6.41	54	2.54n	24	27	35.15	56	14. 4n	19
28	7.36	55	3.17n	23	28	36.12	57	14.23n	19
29	8.30	54	3.40n	23	29	37. 9	57	14.41n	18
30	9.25	55	4. 4n	24	30	38. 6	57	15. 0n	19
31	10.19	54	4.27n	23					

SUN's TABLE in 1793 and 1797.

	MAY					JUNE			
	Right Ascension.		Declination.			Right Ascension.		Declination.	
Day	Deg. M.	Diff	Deg. M.	Diff.	Day	Deg. M.	Diff.	Deg. M.	Diff.
1	39.3	M.	15.18n	M.	1	69.46	M.	22.10n	M.
2	40.1	58	15.36n	18	2	70.48	62	22.17n	7
3	40.58	57	15.53n	17	3	71.49	61	22.25n	8
4	41.56	58	16.11n	18	4	72.51	62	22.32n	7
5	42.54	58	16.28n	17	5	73.53	62	22.38n	6
6	43.52	58	16.44n	16	6	74.55	62	22.44n	6
7	44.50	58	17.1n	17	7	75.57	62	22.50n	6
8	45.48	58	17.17n	16	8	76.59	62	22.55n	5
9	46.46	58	17.33n	16	9	78.1	62	23.0n	5
10	47.45	59	17.49n	16	10	79.3	62	23.5n	5
11	48.43	58	18.4n	15	11	80.5	62	23.9n	4
12	49.42	59	18.19n	15	12	81.7	62	23.13n	4
13	50.41	59	18.34n	15	13	82.9	62	23.16n	3
14	51.40	59	18.48n	14	14	83.12	63	23.19n	3
15	52.40	60	19.2n	14	15	84.14	62	23.21n	2
16	53.39	59	19.16n	14	16	85.16	62	23.23n	2
17	54.38	59	19.30n	14	17	86.19	63	23.25n	2
18	55.38	60	19.43n	13	18	87.21	62	23.26n	1
19	56.38	60	19.56n	13	19	88.23	62	23.27n	1
20	57.38	60	20.8n	12	20	89.26	63	23.28n	1
21	58.38	60	20.20n	12	21	90.28	62	23.28n	0
22	59.38	60	20.32n	12	22	91.30	62	23.28n	0
23	60.38	60	20.43n	11	23	92.33	63	23.27n	1
24	61.39	61	20.54n	11	24	93.35	62	23.26n	1
25	62.39	60	21.5n	11	25	94.37	62	23.24n	2
26	63.40	61	21.15n	10	26	95.40	63	23.22n	2
27	64.41	61	21.25n	10	27	96.42	62	23.19n	3
28	65.42	61	21.35n	10	28	97.44	62	23.16n	3
29	66.43	61	21.44n	9	29	98.46	62	23.13n	3
30	67.44	61	21.53n	9	30	99.48	62	23.9n	4
31	68.45	61	22.1n	8					

SUN's TABLE in 1793 and 1797.

JULY.

Day	Right Ascension. Deg. M.	Diff.	Declination. Deg. M.	Diff.
1	100.50	M.	23. 5n.	M.
2	101.52	62	23. 1n.	4
3	102.54	62	22.56n.	5
4	103.56	62	22.51n.	5
5	104.58	62	22.45n.	6
6	106. 0	62	22.39n.	6
7	107. 1	61	22.32n.	7
8	108. 3	62	22.25n.	7
9	109. 4	61	22.18n.	7
10	110. 5	61	22.10n.	8
11	111. 6	61	22. 3n.	8
12	112. 7	61	21.54n.	9
13	113. 8	61	21.45n.	9
14	114. 9	61	21.36n.	9
15	115.10	61	21.27n.	9
16	116.11	61	21.17n.	10
17	117.11	60	21. 7n.	10
18	118,11	60	20.56n.	11
19	119.11	60	20.45n.	11
20	120.11	60	20.34n.	11
21	121.11	60	20.22n.	12
22	122.11	60	20.10n.	12
23	123.11	60	19.58n.	12
24	124.10	59	19.45n.	13
25	125. 9	59	19.32n.	13
26	126. 8	59	19.19n.	13
27	127. 7	59	19. 5n.	14
28	128. 6	59	18.51n.	14
29	129. 5	59	18.37n.	14
30	130, 3	58	18.23n.	14
31	131. 2	59	18. 8n.	15

AUGUST.

Day	Right Ascension. Deg. M.	Diff.	Declination. Deg. M.	Diff.
1	132. 0	M.	17.53n.	M.
2	132.58	58	17.37n.	16
3	133.56	58	17.21n.	16
4	134.54	58	17. 5n.	16
5	135.52	58	16.49n.	16
6	136.49	57	16.33n.	16
7	137.47	58	16.16n.	17
8	138.44	57	15.59n.	17
9	139.41	57	15.41n.	18
10	140.38	57	15.24n.	17
11	141.35	57	15. 6n.	18
12	142.31	56	14.48n.	18
13	143.28	57	14.29n.	19
14	144.24	56	14.11n.	18
15	145.21	57	13.52n.	19
16	146.17	56	13.33n.	19
17	147.13	56	13.14n.	19
18	148. 9	56	12.54n.	20
19	149. 4	55	12.35n.	19
20	150. 0	56	12.15n.	20
21	150.55	55	11.55n.	20
22	151.51	56	11.34n.	21
23	152.46	55	11.14n.	20
24	153.41	55	10.53n.	21
25	154.36	55	10.33n.	20
26	155.31	55	10.12n.	21
27	156.26	55	9.51n.	21
28	157.21	55	9.29n.	22
29	158.15	54	9. 8n.	21
30	159.10	55	8.47n.	21
31	160. 5	55	8.25n.	22

SUN's TABLE in 1793 and 1797.

SEPTEMBER.						OCTOBER.					
Right Ascension.			Declination.			Right Ascension.			Declination.		
Day	Deg. M.	Diff.	Deg. M.	Diff.		Day	Deg. M.	Diff.	Deg. M.	Diff.	
1	160.59	M.	8. 3n.	M.		1	188. 1	M.	3.28s.	M.	
2	161.53	54	7.41n.	22		2	188.45	54	3.51s.	23	
3	162.48	55	7.19n.	22		3	189.50	55	4.14s.	23	
4	163.42	54	6.57n.	22		4	190.45	55	4.38s.	24	
5	164.36	54	6.34n.	23		5	191.39	54	5. 1s.	23	
6	165.30	54	6.12n.	22		6	192.34	55	5.24s.	23	
7	166.25	55	5.49n.	23		7	193.29	55	5.47s.	23	
8	167.19	54	5.27n.	22		8	194.24	55	6.10s.	23	
9	168.13	54	5. 4n.	23		9	195.19	55	6.33s.	23	
10	169. 7	54	4.41n.	23		10	196.15	56	6.55s.	22	
11	170. 1	54	4.18n.	23		11	197.10	55	7.18s.	22	
12	170.55	54	5.55n.	23		12	198. 6	56	7.41s.	23	
13	171.48	53	3.32n.	23		13	199. 1	55	8. 3s.	23	
14	172.42	54	3. 9n.	23		14	199.57	56	8.25s.	22	
15	173.36	54	2.46n.	23		15	200.53	56	8.48s.	23	
16	174.30	54	2.23n.	23		16	201.49	56	9.10s.	22	
17	175.24	54	2. 0n.	23		17	202.45	56	9.32s.	22	
18	176.18	54	1.36n.	24		18	203.41	56	9.54s.	22	
19	177.12	54	1.13n.	23		19	204.38	57	10.15s.	21	
20	178. 5	53	0.50n.	23		20	205.34	56	10.37s.	22	
21	178.59	54	0.26n.	24		21	206.31	57	10.58s.	21	
22	179.53	54	0. 3n.	23		22	207.28	57	11.19s.	21	
23	180.47	54	0.21s.	24		23	208.26	58	11.40s.	21	
24	181.41	54	0.44s.	23		24	209 23	57	12. 1s.	21	
25	182.35	54	1. 7s.	23		25	210.20	57	12.22s.	21	
26	183.29	54	1.31s.	24		26	211.18	58	12.43s.	21	
27	184.24	55	1.54s.	23		27	212.16	58	13. 3s.	20	
28	185.18	54	2.18s.	24		28	213.14	58	13.23s.	20	
29	186.12	54	2.41s.	23		29	214.12	58	13.43s.	20	
30	187. 6	54	3. 4s.	23		30	215.11	59	14. 2s.	19	
						31	216.10	59	14.22s.	20	

SUN's TABLE, in 1793 and 1797.

| | NOVEMBER | | | | | | DECEMBER | | | |
| | Right Ascension. | | | Declination. | | | Right Ascension. | | | Declination. | |
Day	Deg. M.	Diff.	Deg. M.	Diff.	Day	Deg. M.	Diff.	Deg. M.	Diff.
1	217. 9	M	14.41s	M	1	248.11	M	21.57s	M.
2	218. 8	59	15. 0s	19	2	249.16	65	22. 6s	9
3	219. 7	59	15.19s	19	3	250.21	65	22.14s	8
4	220. 7	60	15.37s	18	4	251.27	66	22.22s	8
5	221. 6	59	15.56s	19	5	252.32	65	22.29s	7
6	222. 6	60	16.14s	18	6	253.38	65	22.36s	7
7	223. 6	60	16.31s	17	7	254.44	66	22.43s	7
8	224. 7	61	16.49s	18	8	255.49	65	22.49s	6
9	225. 7	60	17. 6s	17	9	256.55	66	22.55s	6
10	226. 8	61	17.23s	17	10	258. 2	67	23. 0s	5
11	227. 9	61	17.39s	16	11	259. 8	66	23. 5s	5
12	228.10	61	17.55s	16	12	260.14	66	23.10s	5
13	229.12	62	18.11s	16	13	261.20	66	23.14s	4
14	230.13	61	18.27s	16	14	262.27	67	23.17s	3
15	231.15	62	18.42s	15	15	263.33	66	23.20s	3
16	232.17	62	18.57s	15	16	264.40	67	23.22s	2
17	233.19	62	19.12s	15	17	265.46	67	23.24s	2
18	234.22	63	19.26s	14	18	266.53	67	23.26s	2
19	235.24	62	19.40s	14	19	267.59	66	23.27s	1
20	236.27	63	19.53s	13	20	269. 6	67	23.28s	1
21	237.30	63	20. 6s	13	21	270.12	66	23.28s	0
22	238.33	63	20.19s	13	22	271.19	67	23.28s	0
23	239.37	64	20.32s	13	23	272.26	67	23.27s	1
24	240.40	63	20.44s	12	24	273.32	66	23.26s	1
25	241.44	64	20.56s	12	25	274.39	67	23.24s	2
26	242.48	64	21. 7s	11	26	275.46	67	23.22s	2
27	243.52	64	21.17s	10	27	276.52	66	23.19s	3
28	244.57	65	21.28s	11	28	277.59	67	23.16s	3
29	246. 1	64	21.38s	10	29	279. 5	67	23.12s	4
30	247. 6	65	21.48s	10	30	280.12	67	23. 8s	4
					31	281.18	66	23. 3s	5

SUN's TABLE in 1794 and 1798.

	JANUARY.				FEBRUARY.			
	Right Afcenfion.		Declination.		Right Afcenfion.		Declination.	
Day	Deg. M.	Diff.	Deg. M.	Diff.	Deg. M.	Diff.	Deg. M.	Diff.
1	282.24	M.	22.58s.	M.	315.26	M.	16.56s.	M.
2	283.31	67	22.53s.	5	316.27	61	16.39s.	17
3	284.37	66	22.47s.	6	317.27	60	16.21s.	18
4	285.43	66	22.41s.	6	318.28	61	16. 3s.	18
5	286.49	66	22.34s.	7	319.28	60	15.45s.	18
6	287.54	65	22.27s.	7	320.28	60	15.27s.	18
7	289. 0	66	22.19s.	8	321.28	60	15. 8s.	19
8	290. 6	66	22.11s.	8	322.28	60	14.49s.	19
9	291.11	65	22. 2s.	9	323.27	59	14.30s.	19
10	292.16	65	21.53s.	9	324.26	59	14.10s.	20
11	293.21	65	21.44s.	9	325.25	59	13.50s.	20
12	294.26	65	21.34s.	10	326.24	59	13.30s.	20
13	295.31	65	21.24s.	10	327.23	59	13.10s.	20
14	296.35	64	21.13s.	11	328.21	58	12.50s.	20
15	297.40	65	21. 2s.	11	329.20	59	12.29s.	21
16	298.44	64	20.50s.	12	330.18	58	12. 8s.	21
17	299.48	64	20.38s.	12	331.16	58	11.47s.	21
18	300.52	64	20.26s.	12	332.14	58	11.26s.	21
19	301.56	64	20.13s.	13	333.11	57	11. 5s.	21
20	302.59	63	20. 0s.	13	334. 9	58	10.43s.	22
21	304. 2	63	19.47s.	13	335. 6	57	10.21s.	22
22	305. 5	63	19.33s.	14	336. 3	57	10. 0s.	21
23	306. 8	63	19.19s.	14	337. 0	57	9.38s.	22
24	307.11	63	19. 5s.	14	337.57	57	9.15s.	23
25	308.14	63	18.50s.	15	338.53	56	8.53s.	22
26	309.16	62	18.34s.	16	339.50	57	8.31s.	22
27	310.18	62	18.19s.	15	340.46	56	8. 8s.	23
28	311.20	62	18. 3s.	16	341.43	57	7.45s.	23
29	312.22	62	17.47s.	16				
30	313.23	61	17.30s.	17				
31	314.25	62	17.14s.	16				

SUN's TABLE in 1794 and 1798.

	MARCH					APRIL			
	Right Ascension.		Declination.			Right Ascension.		Declination.	
Day	Deg. M.	Diff.	Deg. M.	Diff.	Day	Deg. M.	Diff.	Deg. M.	Diff.
1	342.39	M.	7.23s	M.	1	11. 1	M.	4.44n	M.
2	343.35	56	7. 0s	23	2	11.55	54	5. 7n	23
3	344.31	56	6.37s	23	3	12.50	55	5.30n	23
4	345.26	55	6.14s	23	4	13.44	54	5.53n	23
5	346.22	56	5.50s	23	5	14.39	55	6.16n	23
6	347.18	56	5.27s	23	6	15.34	55	6.39n	23
7	348.13	55	5. 4s	23	7	16.29	55	7. 1n	22
8	349. 8	55	4.40s	24	8	17.24	55	7.24n	23
9	350. 4	56	4.17s	23	9	18.18	54	7.46n	22
10	350.59	55	3.54s	23	10	19.13	55	8. 8n	22
11	351.54	55	3.30s	24	11	20. 8	55	8.30n	22
12	352.49	55	3. 6s	24	12	21. 3	55	8.52n	22
13	353.44	55	2.43s	23	13	21.59	56	9.14n	22
14	354.39	55	2.19s	24	14	22.54	55	9.35n	21
15	355.34	55	1.56s	24	15	23.49	55	9.57n	22
16	356.28	54	1.32s	24	16	24.45	55	10.18n	21
17	357.23	55	1. 8s	24	17	25.40	55	10.39n	21
18	358.28	55	0.44s	24	18	26.36	56	11. 0n	21
19	359.12	54	0.21s	23	19	27.32	56	11.21n	21
20	0. 7	55	0. 3n	24	20	28.27	55	11.41n	20
21	1. 1	54	0.27n	24	21	29.23	56	12. 1n	20
22	1.56	55	0.50n	23	22	30.19	56	12.22n	21
23	2.50	54	1.14n	24	23	31.16	57	12.42n	20
24	3.45	55	1.37n	23	24	32.12	56	13. 1n	19
25	4.39	54	2. 1n	24	25	33. 8	56	13.21n	20
26	5.34	55	2.24n	23	26	34. 5	57	13.40n	19
27	6.28	54	2.48n	24	27	35. 2	57	13.59n	19
28	7.23	55	3.11n	23	28	35.58	57	14.18n	19
29	8.17	54	3.35n	24	29	36.55	57	14.37n	19
30	9.12	55	3.58n	23	30	37.52	57	14.55n	18
31	10. 6	54	4.21n	23					

Here ends Sheet I. supplementary.

DAILY TABLES of NAUTICAL SCIENCES,

Supplementary, constructed and computed by SAMUEL DUNN.

SUN's TABLE in 1794 and 1798.

	MAY					JUNE			
	Right Ascension.		Declination.			Right Ascension.		Declination.	
Day	Deg. M.	Diff.	Deg. M.	Diff.	Day	Deg. M.	Diff.	Deg. M.	Diff.
1	38.50	M.	15.13n.	18	1	69.32	M.	22. 8n.	M.
2	39.47	57	15.31n.	18	2	70.33	61	22.16n.	8
3	40.44	57	15.49n.	18	3	71.35	62	22.23n.	7
4	41.42	58	16. 6n.	17	4	72.36	61	22.30n.	7
5	42.40	58	16.24n.	18	5	73.38	62	22.37n.	7
6	43.38	58	16.40n.	16	6	74.40	62	22.43n.	6
7	44.36	58	16.57n.	17	7	75.42	62	22.49n.	6
8	45.34	58	17.13n.	16	8	76.43	61	22.54n.	5
9	46.32	58	17.29n.	16	9	77.45	62	22.59n.	5
10	47.31	59	17.45n.	16	10	78.48	63	23. 4n.	5
11	48.29	58	18. 0n.	15	11	79.50	62	23. 8n.	4
12	49.28	59	18.15n.	15	12	80.52	62	23.12n.	4
13	50.27	59	18.30n.	15	13	81.54	62	23.15n.	3
14	51.26	59	18.45n.	15	14	82.56	62	23.18n.	3
15	52.25	59	18.59n.	14	15	83.59	63	23.21n.	3
16	53.24	59	19.13n.	14	16	85. 1	62	23.23n.	2
17	54.24	60	19.26n.	13	17	86. 3	62	23.25n.	2
18	55.23	59	19.40n.	14	18	87. 6	63	23.26n.	1
19	56.23	60	19.53n.	13	19	88. 8	62	23.27n.	1
20	57.23	60	20. 5n.	12	20	89.10	62	23.28n.	1
21	58.23	60	20.17n.	12	21	90.13	63	23.28n.	0
22	59.23	60	20.29n.	12	22	91.15	62	23.28n.	0
23	60.23	60	20.41n.	12	23	92.17	62	23.27n.	1
24	61.24	61	20.52n.	11	24	93.20	63	23.26n.	1
25	62.24	60	21. 3n.	11	25	94.22	62	23.24n.	2
26	63.25	61	21.13n.	10	26	95.24	62	23.22n.	2
27	64.26	61	21.23n.	10	27	96.27	63	23.20n.	2
28	65.27	61	21.33n.	10	28	97.29	62	23.17n.	3
29	66.28	61	21.42n.	9	29	98.31	62	23.14n.	3
30	67.29	61	21.51n.	9	30	99.33	62	23.10n.	4
31	68.30	61	22. 0n.	9					

SUN's TABLE in 1794 and 1798.

	JULY					AUGUST			
	Right Ascension.		Declination.			Right Ascension.		Declination.	
Day	Deg. M.	Diff.	Deg. M	Diff.	Day	Deg. M.	Diff.	Deg. M.	Diff.
1	100.35	M.	23. 6n.	M.	1	131.46	M.	17.56n.	M.
2	101.37	62	23. 2n.	4	2	132.44	58	17.41n.	15
3	102.39	62	22.57n.	5	3	133.42	58	17.25n.	16
4	103.41	62	22.52n.	5	4	134.40	58	17. 9n.	16
5	104.43	62	22.46n.	6	5	135.38	58	16.53n.	16
6	105.45	62	22.40n.	6	6	136.35	57	16.37n.	16
7	106.46	61	22.34n.	6	7	137.33	58	16.20n.	17
8	107.48	62	22.27n.	7	8	138.30	57	16. 3n.	17
9	108.49	61	22.20n.	7	9	139.27	57	15.45n.	18
10	109.50	61	22.13n.	7	10	140.24	57	15.28n.	17
11	110.51	61	22. 5n.	8	11	141.21	57	15.10n.	18
12	111.52	61	21.56n.	9	12	142.18	57	14.52n.	18
13	112.53	61	21.48n.	8	13	143.14	56	14.34n.	18
14	113.54	61	21.39n.	9	14	144.10	57	14.16n.	18
15	114.55	61	21.29n.	10	15	145. 7	57	13.57n.	19
16	115.56	61	21.19n.	10	16	146. 3	56	13.38n.	19
17	116.56	60	21. 9n.	10	17	146.59	56	13.18n.	20
18	117.56	60	20.59n.	10	18	147.55	56	12.59n.	19
19	118.57	61	20.48n.	11	19	148.51	56	12.39n.	20
20	119.57	60	20.37n.	11	20	149.46	55	12.20n.	19
21	120.57	60	20.25n.	12	21	150.42	56	12. 0n.	20
22	121.56	59	20.13n.	12	22	151.37	55	11.39n.	21
23	122.56	60	20. 1n.	12	23	152.32	55	11.19n.	20
24	123.55	59	19.48n.	13	24	153.28	56	10.59n.	20
25	124.55	60	19.35n.	13	25	154.23	55	10.38n.	21
26	125.54	59	19.22n.	13	26	155.18	55	10.17n.	21
27	126.53	59	19. 9n.	13	27	156.13	55	9.56n.	21
28	127.52	59	18.55n.	14	28	157. 8	55	9.35n.	21
29	128.51	59	18.41n.	14	29	158. 2	54	9.13n.	22
30	129.50	59	18.26n.	15	30	158.57	55	8.52n.	21
31	130.48	58	18.11n.	15	31	159.51	54	8.30n.	22

SUN's TABLE in 1794 and 1798.

	SEPTEMBER					OCTOBER			
	Right Ascension.		Declination.			Right Ascension.		Declination.	
Day	Deg. M.	Diff.	Deg. M.	Diff.	Day	Deg. M.	Diff.	Deg. M.	Diff.
1	160.46	M.	8. 8n.	M.	1	187.48	M.	3.22s.	M.
2	161.40	54	7.46n.	22	2	188.42	54	3.45s.	23
3	162.35	54	7.24n.	22	3	189.37	55	4. 9s.	24
4	163.29	55	7. 2n.	22	4	190.31	54	4.32s.	23
5	164.23	54	6.40n.	22	5	191.26	55	4.55s.	23
6	165.17	54	6.17n.	23	6	192.21	55	5.18s.	23
7	166.11	54	5.55n.	23	7	193.16	55	5.41s.	23
8	167. 5	54	5.32n.	23	8	194.11	55	6. 4s.	23
9	167.59	54	5.10n.	22	9	195. 6	55	6.27s.	23
10	168.53	54	4.47n.	23	10	196. 1	55	6.50s.	23
11	169.47	54	4.24n.	23	11	196.56	55	7.12s.	22
12	170.41	54	4. 1n.	23	12	197.52	56	7.35s.	23
13	171.35	54	3.38n.	23	13	198.47	55	7.58s.	23
14	172.29	54	3.15n.	23	14	199.43	56	8.20s.	22
15	173.23	54	2.52n.	23	15	200.39	56	8.42s.	22
16	174.17	54	2.29n.	23	16	201.35	56	9. 4s.	22
17	175.11	54	2. 5n.	24	17	202.31	56	9.26s.	22
18	176. 5	54	1.42n.	23	18	203.27	56	9.48s.	22
19	176.58	53	1.19n.	23	19	204.24	57	10.10s.	22
20	177.52	54	0.55n.	24	20	205.21	57	10.32s.	22
21	178.46	54	0.32n.	23	21	206.17	56	10.53s.	21
22	179.40	54	0. 9n.	23	22	207.14	57	11.14s.	21
23	180.34	54	0.15s.	24	23	208.12	58	11.35s.	21
24	181.28	54	0.38s.	23	24	209. 9	57	11.56s.	21
25	182.22	54	1. 2s.	24	25	210. 6	57	12.17s.	21
26	183.16	54	1.25s.	23	26	211. 4	58	12.38s.	21
27	184.10	54	1.49s.	24	27	212. 2	58	12.58s.	20
28	185. 5	55	2.12s.	23	28	213. 0	58	13.18s.	20
29	185.59	54	2.35s.	23	29	213.58	58	13.38s.	20
30	186.53	54	2.59s.	24	30	214.57	59	13.58s.	20
					31	215.55	58	14.17s.	19

E 2

SUN's TABLE in 1794 and 1798.

	NOVEMBER.					DECEMBER.			
	Right Ascension.		Declination.			Right Ascension.		Declination.	
Day	Deg. M.	Diff.	Deg. M.	Diff.	Day	Deg. M.	Diff.	Deg. M.	Diff.
1	216.54	M.	14.37s	M.	1	247.55	M.	21.55s	M.
2	217.53	59	14.56s	19	2	249. 0	65	22. 4s	9
3	218.52	59	15.14s	18	3	250. 5	65	22.12s	8
4	219.52	60	15.33s	19	4	251.11	66	22.20s	8
5	220.52	60	15.51s	18	5	252.16	65	22.28s	8
6	221.52	60	16. 9s	18	6	253.22	66	22.35s	7
7	222.52	60	16.27s	18	7	254.27	65	22.42s	7
8	223.52	60	16.44s	17	8	255.33	66	22.48s	6
9	224.52	60	17. 2s	18	9	256.39	66	22.54s	6
10	225.53	61	17.18s	16	10	257.45	66	22.59s	5
11	226.54	61	17.35s	17	11	258.51	66	23. 4s	5
12	227.55	61	17.51s	16	12	259.57	66	23. 9s	4
13	228.56	61	18. 7s	16	13	261. 4	67	23.13s	3
14	229.58	62	18.23s	16	14	262.10	66	23.16s	3
15	231. 0	62	18.38s	15	15	263.16	66	23.19s	3
16	232. 2	62	18.53s	15	16	264.23	67	23.22s	3
17	233. 4	62	19. 8s	15	17	265.29	66	23.24s	2
18	234. 6	62	19.22s	14	18	266.36	67	23.26s	2
19	235. 9	63	19.36s	14	19	267.43	67	23.27s	1
20	236.12	63	19.50s	14	20	268.49	66	23.28s	1
21	237.15	63	20. 3s	13	21	269.56	67	23.28s	0
22	238.18	63	20.16s	13	22	271. 3	67	23.28s	0
23	239.21	63	20.29s	13	23	272.10	67	23.27s	1
24	240.25	64	20.41s	12	24	273.16	66	23.	1
25	241.29	64	20.53s	12	25	274.23	67	23.24s	2
26	242.33	64	21. 4s	11	26	275.30	67	23.22s	2
27	243.37	64	21.15s	11	27	276.36	66	23.19s	3
28	244.41	64	21.25s	10	28	277.43	67	23.16s	3
29	245.43	64	21.36s	11	29	278.49	66	23.13s	3
30	246.50	65	21.46s	10	30	279.56	67	23. 9s	4
					31	281. 2	66	23. 5s	5

SUN's TABLE in 1795 and 1799.

| | JANUARY | | | | | FEBRUARY | | | |
| | Right Ascension. | | Declination. | | | Right Ascension. | | Declination. | |
Day	Deg. M.	Diff.	Deg. M.	Diff.	Day	Deg. M.	Diff.	Deg. M.	Diff.
1	282. 8	M.	23. 0s.	M.	1	315.11	M.	17. 1s.	M.
2	283.15	66	22.54s.	6	2	316.12	61	16.43s.	18
3	284.20	65	22.48s.	6	3	317.12	60	16.26s.	17
4	285.26	66	22.42s.	6	4	318.13	61	16. 8s.	18
5	286.32	66	22.35s.	7	5	319.13	60	15.50s.	18
6	287.38	66	22.28s.	7	6	320.13	60	15.31s.	19
7	288.44	66	22.21s.	7	7	321.13	60	15.13s.	18
8	289.49	65	22.13s.	8	8	322.13	60	14.54s.	19
9	290.54	65	22. 4s.	9	9	323.12	59	14.34s.	20
10	292. 0	66	21.55s.	9	10	324.12	60	14.15s.	19
11	293. 5	65	21.46s.	9	11	325.11	59	13.55s.	20
12	294.10	65	21.36s.	10	12	326.10	59	13.35s.	20
13	295.15	65	21.26s.	10	13	327. 9	59	13.15s.	20
14	296.19	64	21.15s.	11	14	328. 7	58	12.55s.	20
15	297.24	65	21. 4s.	11	15	329. 5	58	12.34s.	21
16	298.28	64	20.53s.	11	16	330. 4	59	12.13s.	21
17	299.32	64	20.41s.	12	17	331. 2	58	11.52s.	21
18	300.36	64	20.29s.	12	18	332. 0	58	11.31s.	21
19	301.40	64	20.17s.	12	19	332.57	57	11.10s.	21
20	302.43	63	20. 4s.	13	20	333.55	58	10.48s.	22
21	303.47	64	20.50s.	14	21	334.52	57	10.27s.	21
22	304.50	63	19.37s.	13	22	335.49	57	10. 5s.	22
23	305.53	63	19.23s.	14	23	336.46	57	9.43s.	22
24	306.56	63	19. 8s.	15	24	337.43	57	9.21s.	22
25	307.59	63	18.53s.	15	25	338.40	57	8.58s.	23
26	309. 1	62	18.38s.	15	26	339.37	57	8.36s.	22
27	310. 3	62	18.23s.	15	27	340.33	56	8.14s.	22
28	311. 5	63	18. 7s.	16	28	341.29	56	7.51s.	22
29	312. 7	62	17.51s.	16					
30	313. 9	62	17.34s.	17					
31	314.10	61	17.18s.	16					

SUN's TABLE in 1795 and 1799.

| | MARCH | | | | | APRIL | | | |
| | Right Ascension. | | Declination. | | | Right Ascension. | | Declination. | |
Day	Deg. M.	Diff.	Deg. M.	Diff.	Day	Deg. M.	Diff.	Deg. M.	Diff.
1	342.25	M.	7.28s.	M.	1	10.47	M.	4.39n.	M.
2	343.21	56	7.5s.	23	2	11.42	55	5.2n.	23
3	344.17	56	6.42s.	23	3	12.36	54	5.25n.	23
4	345.13	56	6.19s.	23	4	13.31	55	5.48n.	23
5	346.9	56	5.56s.	23	5	14.26	55	6.10n.	22
6	347.4	55	5.33s.	23	6	15.20	54	6.33n.	23
7	348.0	56	5.10s.	23	7	16.15	55	6.56n.	23
8	348.55	55	4.46s.	24	8	17.10	55	7.18n.	22
9	349.50	55	4.23s.	23	9	18.5	55	7.40n.	22
10	350.45	55	3.59s.	24	10	19.0	55	8.3n.	23
11	351.40	55	3.36s.	23	11	19.55	55	8.25n.	22
12	352.35	55	3.12s.	24	12	20.50	55	8.47n.	22
13	353.30	55	2.49s.	23	13	21.45	55	9.8n.	21
14	354.25	55	2.25s.	24	14	22.40	55	9.30n.	22
15	355.20	55	2.1s.	24	15	23.36	56	9.51n.	21
16	356.15	55	1.38s.	23	16	24.31	55	10.13n.	22
17	357.10	55	1.14s.	24	17	25.27	56	10.34n.	21
18	358.4	54	0.50s.	24	18	26.22	55	10.55n.	21
19	358.59	55	0.27s.	23	19	27.18	56	11.16n.	21
20	359.54	55	0.3s.	24	20	28.14	56	11.36n.	20
21	0.48	54	0.21n.	24	21	29.10	56	11.57n.	21
22	1.42	54	0.45n.	24	22	30.6	56	12.17n.	20
23	2.37	55	1.8n.	23	23	31.2	56	12.37n.	20
24	3.31	54	1.32n.	24	24	31.58	56	12.57n.	20
25	4.26	55	1.55n.	23	25	32.55	57	13.16n.	19
26	5.20	54	2.19n.	24	26	33.51	56	13.36n.	20
27	6.15	55	2.42n.	23	27	34.48	57	13.55n.	19
28	7.9	54	3.6n.	24	28	35.45	57	14.14n.	19
29	8.4	55	3.29n.	23	29	36.42	57	14.32n.	18
30	8.58	54	3.52n.	23	30	37.39	57	14.51n.	19
31	9.53	55	4.16n.	24					

SUN's TABLE in 1795 and 1799.

	MAY					JUNE			
	Right Afcenfion.		Declination.			Right Afcenfion.		Declination.	
Day	Deg. M.	Diff.	Deg. M.	Diff.	Day	Deg. M.	Diff.	Deg. M.	Diff.
1	38.36	M.	15. 9n.	M.	1	69.17	M.	22. 6n.	M.
2	39.33	57	15.27n.	18	2	70.18	61	22.14n.	8
3	40.31	58	15.45n.	18	3	71.20	62	22.21n.	7
4	41.28	57	16. 2n.	17	4	72.21	61	22.28n.	7
5	42.26	58	16.19n.	17	5	73.23	62	22.35n.	7
6	43.24	58	16.36n.	17	6	74.25	62	22.41n.	6
7	44.22	58	16.53n.	17	7	75.27	62	22.47n.	6
8	45.20	58	17. 9n.	16	8	76.28	61	22.53n.	6
9	46.18	58	17.25n.	16	9	77.30	62	22.58n.	5
10	47.16	58	17.41n.	16	10	78.32	62	23. 3n.	5
11	48.15	59	17.57n.	16	11	79.35	63	23. 7n.	4
12	49.14	59	18.12n.	15	12	80.37	62	23.11n.	4
13	50.13	59	18.27n.	15	13	81.39	62	23.15n.	4
14	51.12	59	18.41n.	14	14	82.42	63	23.18n.	3
15	52.11	59	18.56n.	15	15	83.44	62	23.21n.	3
16	53.10	59	19.10n.	14	16	84.46	62	23.23n.	2
17	54.10	60	19.23n.	13	17	85.49	63	23.25n.	2
18	55. 9	59	19.36n.	13	18	86.51	62	23.26n.	1
19	56. 9	60	19.49n.	13	19	87.53	62	23.27n.	1
20	57. 9	60	20. 2n.	13	20	88.56	63	23.28n.	1
21	58. 9	60	20.14n.	12	21	89.58	62	23.28n.	0
22	59. 9	60	20.26n.	12	22	91. 1	63	23.28m.	0
23	60. 9	60	20.38n.	12	23	92. 3	62	23.27n.	1
24	61.10	61	20.49n.	11	24	93. 5	62	23.26n.	1
25	62.10	60	21. 0n.	11	25	94. 7	62	23.25n.	1—
26	63.11	61	21.10n.	10	26	95.10	63	23.23n.	2
27	64.12	61	21.21n.	11	27	96.12	62	23.21n.	2
28	65.12	60	21.31n.	10	28	97.14	62	23.18n.	3
29	66.13	61	21.40n.	9	29	98.16	62	23.15n.	3
30	67.14	61	21.49n.	9	30	99.19	63	23.11n.	4
31	68.15	61	21.58n.	9					

SUN's TABLE in 1795 and 1799.

	JULY.					AUGUST.				
	Right Ascension.		Declination.			Right Ascension.		Declination.		
Day	Deg. M.	Diff.	Deg. M.	Diff.	Day	Deg. M.	Diff.	Deg. M.	Diff.	
1	100.21	M.	23. 7n.	M.	1	131.32	M.	18. on.	M.	
2	101.23	62	23. 3n.	4	2	132.31	59	17.45n.	15	
3	102.25	62	22.58n.	5	3	133.29	58	17.29n.	16	
4	103.26	61	22.53n.	5	4	134.26	57	17.13n.	16	
5	104.28	62	22.48n.	5	5	135.24	58	16.57n.	16	
6	105.30	61	22.42n.	6	6	136.22	58	16.41n.	16	
7	106.31	61	22.36n.	6	7	137.19	57	16.24n.	17	
8	107.33	62	22.29n.	7	8	138.16	57	16. 7n.	17	
9	108.34	61	22.22n.	7	9	139.14	58	15.50n.	17	
10	109.36	62	22.15n.	7	10	140.11	57	15.32n.	18	
11	110.37	61	22. 7n.	8	11	141. 7	56	15.14n.	18	
12	111.38	61	21.59n.	8	12	142. 4	57	14.56n.	18	
13	112.39	61	21.50n.	9	13	143. 1	57	14.38n.	18	
14	113.40	61	21.41n.	9	14	143.57	56	14.20n.	18	
15	114.41	61	21.32n.	9	15	144.54	57	14. 1n.	19	
16	115.41	60	21.22n.	10	16	145.50	56	13.42n.	18	
17	116.42	61	21.12n.	10	17	146.46	56	13.23n.	19	
18	117.42	60	21. 1n.	11	18	147.42	56	13. 4n.	19	
19	118.43	61	20.51n.	10	19	148.38	56	12.44n.	20	
20	119.43	60	20.40n.	11	20	149.33	55	12.24n.	20	
21	120.43	60	20.28n.	12	21	150.29	56	12. 4n.	20	
22	121.42	59	20.16n.	12	22	151.15	56	11.44n.	20	
23	122.42	60	20. 4n.	12	23	152.20	55	11.24n.	20	
24	123.42	60	19.51n.	13	24	153.15	55	11. 3n.	21	
25	124.41	59	19.39n.	12	25	154.10	55	10.43n.	20	
26	125.40	59	19.26n.	13	26	155. 5	55	10.22n.	21	
27	126.39	59	19.12n.	14	27	156. 0	55	10. 1n.	21	
28	127.38	59	18.58n.	14	28	156.55	55	9.40n.	21	
29	128.37	59	18.44n.	14	29	157.49	54	9.18n.	22	
30	129.36	59	18.30n.	14	30	158.44	55	8.57n.	21	
31	130.34	58	18.15n.	15	31	159.39	55	8.35n.	22	

Here ends Sheet II. supplementary.